

splash!

quick facts on...

Prescribed Burning

A Land Management Tool

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The South Florida Water Management District is a regional, governmental agency that oversees the water resources in the southern half of the state. It is the oldest and largest of the state's five water management districts.

Our Mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems, and water supply.

Fire has been a powerful ecological force since prehistoric times, shaping natural habitats and guiding the evolution of plants and animals. In North America, early explorers found Native Americans burning natural vegetation for a variety of reasons:

- Improving wildlife habitat
- Making hunting easier
- Allowing predators or enemies to be seen
- Reducing biting insects
- Preparing land for agriculture

European settlers continued burning wild lands for many of the same reasons, and to prevent catastrophic fires by maintaining low fuel levels. In the mid-20th century, fires were commonly prevented in the natural environment, often leading to destructive wildfires and declines in wildlife populations. In recent decades, federal, state and county governments have recognized the importance of controlled burning to public safety and effective land management.

Modern Prescribed Burning

When appropriate, natural vegetation burns are encouraged on some lands, but it is done within a range of predetermined conditions designed to ensure a safe burn. This is referred to as prescribed burning.

Florida is a national leader in safely managing prescribed burning through regulation and by training and certifying burners. The Florida Division of Forestry (DOF) bears primary responsibility for regulating burning throughout the state, except on federal lands.

Before the DOF issues an authorization to burn, a detailed plan, or prescription, must be written. On the day of the burn, the DOF's review includes computer modeling to predict smoke impacts. Factors such as weather, fuel levels, staffing requirements and equipment



Trained managers carefully direct a prescribed burn, protecting people and property while enhancing Florida's natural lands.

available are also evaluated. All staff involved in government-conducted prescribed burns have received rigorous training. A burn manager certified by the DOF is in charge of each burn and is always present on site during the burn.

For many years, prescribed burning in Florida involved ignition with kitchen matches by a worker on foot or horseback. Now, specially designed drip torches are used by staff on foot or ATVs. Under certain conditions, flame-throwers mounted on ATVs, trucks, swamp buggies or airboats are used to ignite burns.

Helicopters are sometimes used for burning operations in large areas. They are fitted with a machine that ejects hundreds of treated plastic spheres, each one setting a fire when it hits the ground. The burn manager riding in the helicopter directs the burn operation and coordinates closely with a ground crew to take appropriate fire management actions.

The District's Burn Program

The South Florida Water Management District owns close to 1 million acres of land subject to natural and prescribed fires. Much of this area is managed through partnership agreements with state and local agencies. The District directly manages about 250,000 acres and has an active, prescribed burn program. A total of 20 employees are Certified Burn Managers, and 22 others are trained in working on prescribed burns. The District also maintains a fleet of burn vehicles and related equipment. For large prescribed fires, a helicopter and pilot are leased to help carry out ignition and surveillance activities. Burning is often part of a multi-step process for restoring neglected land. For example, vegetation may need to be chopped with heavy equipment so it will burn more slowly and evenly, without tall flames that endanger trees. Although chopping looks destructive, it makes prescribed fire easier to control and results are better for the environment and wildlife.

Becoming a Certified Burn Manager

Burn certification is managed by DOF, and formal training goes well beyond basic topics such as burning methods and fire safety. Study and testing include subjects ranging from fire behavior, local weather patterns and the ecology of South Florida's natural communities to public relations and legal aspects of burning. Supervised practical experience is an important part of burn certification. Managing a prescribed burn is a test of leadership ability, good judgment and rapid decision-making. It also requires stamina and endurance under extreme conditions of heat and smoke. Mistakes can lead to loss of certification – or even injury,

loss of property or loss of life. Certified burn managers are the heart of a modern system that serves Florida's people and natural resources well.

Benefits to Wildlife

Certain bird species, such as quail and red-cockaded woodpeckers, only thrive in frequently burned habitats. Fire ecology studies have shown that the majority of other wildlife, including deer and turkey, and many rare mammals, birds and reptiles also benefit. Wild rodents find more food and multiply in regularly burned areas, which means predators such as bobcats, foxes, hawks and owls also do well. Although animals are occasionally injured or killed by fire, the ecological system in South Florida is well-adapted to this natural process.



More Information

To learn what you can do to protect your home and neighborhood from wildfires, contact a DOF office or your local fire department. You may be able to arrange for a representative to visit your area, identify dangerous situations and recommend solutions. You can find the Florida Division of Forestry online at www.fl-dof.com. The National Fire Protection Association offers more information online at www.firewise.org.



Prescribed burning is an important land management tool in South Florida. Controlled fires prevent the over-accumulation of leaves, branches and other dry vegetation that could fuel catastrophic wildfires.



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